AEROSPACE MATERIAL SPECIFICATION

AMS2809™	REV. B

Issued 1986-01
Reaffirmed 2018-04
Revised 2024-05

Superseding AMS2809A

Identification, Titanium and Titanium Alloy Wrought Products

RATIONALE

AMS2809B results from a Five-Year Review and update of this specification with changes to update Applicable Documents (see Section 2), relocate Definitions (see 2.2), and add acknowledgement that the material specifications may require specific revisions to the marking requriements when exceptions are taken (see Section 7).

1. SCOPE

This specification covers procedures for identifying wrought products of titanium and titanium alloys.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS7766 Terms Used in Aerospace Metals Specifications

2.2 Definitions

Terms used in AMS specifications are defined in AS7766.

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AMS2809B

3. TECHNICAL REQUIREMENTS

3.1 Bars and Wire

Shall be identified as follows:

3.1.1 Each straight bar over 0.500 inch (12.50 mm) in nominal diameter or least width of flat surface shall be marked in a row of characters recurring at intervals not greater than 3 feet (900 mm) with the material specification number and its revision letter, if any, heat number, and the manufacturer's identification. The characters shall be of such size as to be legible, shall be applied using a suitable marking fluid whose reside shall contain not more than traces of halogen-bearing compounds, and shall be removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the product or its performance and shall be sufficiently stable to withstand normal handling.

3.1.2 Straight bars and wire 0.500 inch (12.50 mm) and under in nominal diameter or least width of flat surface shall be securely bundled and identified by a durable tag marked with the purchase order number, the material specification number and its revision letter, if any, heat number, nominal size, and the manufacturer's identification, and attached to each bundle or shall be boxed and the box marked with the same information.

3.1.3 Coiled bars and wire shall be securely bundled and identified by a durable tag marked with the purchase order number, the material specification number and its revision letter, if any, heat number, nominal size, and the manufacturer's identification, and attached to each coil or shall be boxed and the box marked with the same information.

3.2 Sheet, Strip, and Plate

Shall be identified as follows:

3.2.1 Each sheet, strip, and plate shall be marked on one face, in the respective location indicated below, with the material specification number and its revision letter, if any, heat number, the manufacturer's identification, and nominal thickness. The characters shall be applied using a suitable marking fluid whose reside shall contain not more than traces of halogen-bearing compounds and shall be removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the product of its performance and shall be sufficiently stable to withstand normal handling.

3.2.1.1 Flat strip 6 inches (150 mm) and under in width shall be marked in one or more lengthwise rows of characters recurring at intervals not greater than 3 feet (900 mm).

3.2.1.2 Flat sheet, flat strip over 6 inches (150 mm) in width, and plate shall be marked in lengthwise rows of characters recurring at intervals not greater than 3 feet (900 mm), the rows being spaced not more than 6 inches (150 mm) apart and alternately staggered.

3.2.1.3 Coiled sheet and strip shall be marked near both the outside and inside ends of the coil; the markings shall be applied as in 3.2.1 or shall appear on a durable tag or label attached to the coil and marked with the information of 3.2.1. When the product is wound on cores, the tag or label may be attached to the core.

3.3 Aircraft Tubing

Shall be identified as follows:

3.3.1 Aircraft Tubing Other Than Hydraulic

3.3.1.1 Straight tubes 0.029 inch (0.75 mm) and over in wall thickness and 0.500 inch (12.50 mm) and over in nominal OD, minor axis, or least width of flat surface shall be marked in a row of characters recurring at intervals not greater than 3 feet (900 mm) with the material specification number and its revision letter, if any, heat number, the manufacturer's identification, and nominal wall thickness. The characters shall be of such size as to be legible, shall be applied using a suitable marking fluid whose reside shall contain not more than traces of halogen-bearing compounds, and shall be removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the tubing or its performance and shall be sufficiently stable to withstand normal handling.

3.3.1.2 Straight tubes under 0.029 inch (0.75 mm) in wall thickness or under 0.500 inch (12.50 mm) in nominal OD, minor axis, or least width of flat surface shall be securely bundled and identified by a durable tag marked with the information of 3.3.1 and attached to each bundle or shall be boxed and the box marked with the same information.

3.3.1.3 Coiled tubing shall be securely bundled and identified by a durable tag marked with the purchase order number, the material specification number and its revision letter, if any, heat number, nominal OD and wall thickness, and the manufacturer's identification, and attached to each coil or shall be boxed and the box marked with the same information.

3.3.2 Aircraft Hydraulic Tubing

3.3.2.1 Straight tubing 0.029 inch (0.75 mm) and over in wall thickness and 0.250 inch (6.25 mm) and over in OD, minor axis, or least width of flat surface shall be marked in a row of characters recurring at intervals not greater than 3 feet (900 mm) with the material specification number and its revision letter, if any, heat number, the manufacturer's identification, and nominal wall thickness. The characters shall be of such size as to be legible, shall be applied using a suitable marking fluid whose residue shall contain not more than traces of halogen-bearing compounds, and shall be removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the tubing or its performance and shall be sufficiently stable to withstand normal handling.

3.3.2.2 Straight tubing under 0.029 inch (0.75 mm) in wall thickness or under 0.250 inch (6.25 mm) in nominal OD, minor axis, or least width of flat surface shall be securely bundled and identified by a durable tag marked with the information of 3.3.2.1 and attached to each bundle or shall be boxed and the box marked with the same information.

3.3.2.3 Coiled tubing shall be securely bundled and identified by a durable tag marked with the purchase order number, the material specification number and its revision letter, if any, heat number, nominal OD and wall thickness, and the manufacturer's identification, and attached to each coil or shall be boxed and the box marked with the same information.

3.4 Extruded Bars, Rods, Tubing, and Shapes

Shall be identified as follows:

3.4.1 Each straight bar, rod, and tube 0.500 inch (12.50 mm) and over in nominal OD or least width of flat surface and each straight shape with configuration allowing access to a flat surface at least 0.500 inch (12.50 mm) wide recessed not more than 1 inch (25 mm) below the outline of the shape shall be marked in a row of characters recurring at intervals not greater than 3 feet (900 mm) with the material specification number and its revision letter, if any, heat number, and the manufacturer's identification. The characters shall be of such size as to be legible, shall be applied using a marking fluid whose reside shall contain not more than traces of halogen-bearing compounds, and shall be removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the product or its performance and shall be sufficiently stable to withstand normal handling.

4. QUALITY ASSURANCE PROVISIONS

Not applicable.

5. PREPARATION FOR DELIVERY

Not applicable.

6. ACKNOWLEDGEMENT

Not applicable.

7. REJECTIONS

Product not identified in accordance with this specification or with marking modifications authorized by the material specification or purchaser, will be subject to rejection.